

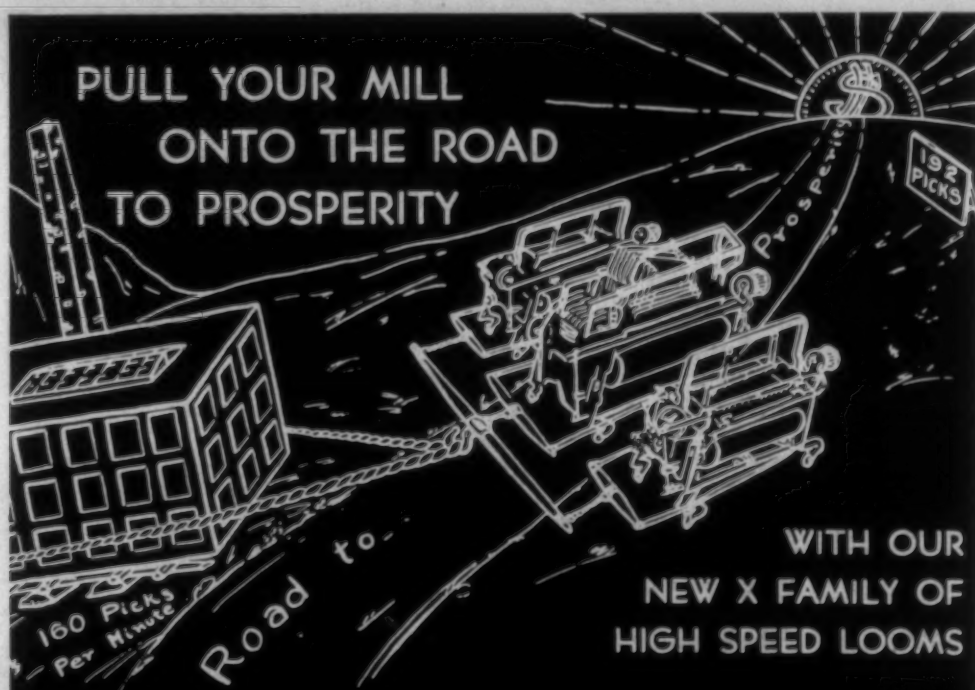
TEXTILE BULLETIN

Vol. 49

DECEMBER 12, 1935

No. 15

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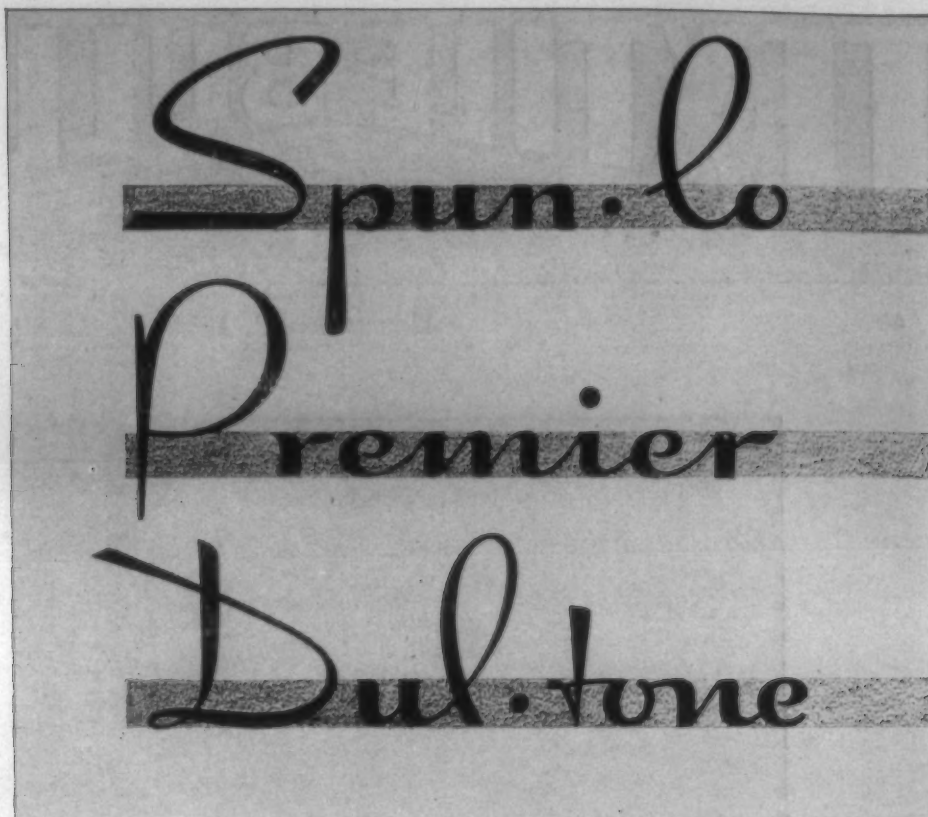
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Says Industry Must Broaden Responsibilities

Alfred Sloan Sees Need of Industrial Statesmanship

IN an address before the meeting in New York last week of the National Association of Manufacturers, Alfred P. Sloan, president of General Motors, spoke on "Industry's Responsibilities Broaden," stressed a number of points that all manufacturers will find of interest.

"We who have the prime responsibilities of the major policies of industry," said Mr. Sloan, "must first convince ourselves as to fundamentals. Then we must convince the organizations of industry. This applies particularly to the workers within industry. Their welfare is at stake. We must also inform our stockholders—those who own industry."

"American industry is not selfish. It would be far more just to say it has been preoccupied—preoccupied in producing. But I am convinced that industry's responsibilities cannot longer be adequately discharged by mere physical production."

Among its first responsibilities he set the "liquidation" of the New Deal and the arresting of government spending.

He said industry must make itself responsible for such an economic balance among wages, selling prices and profits as will promote "a soundly based and widely distributed economic well-being." He declared this objective to be the new "yardstick" of industry.

Mr. Sloan, introduced as "one in the forefront of this group," delivered the address of the occasion, entitled "Industry's Responsibilities Broaden." He said in part:

"Industry must further expand its horizon of thinking and action. It must assume the role of an enlightened industrial statesmanship. To the extent that it accepts such broadened responsibilities, to that degree does it assure the maintenance of private enterprise, and with it the exercise of free initiative, as the sole creator, just as it must always be the most efficient creator of wealth."

"During the past few years it has become the vogue to discredit every instrumentality of accomplishment, be it the individual or the machine. It has been said that American industry is selfish. It would be far more just to say that it has been preoccupied—preoccupied in exploring the secrets of nature and creating a continuous flow of new products."

"But, as we look forward, and as we analyze the evolution that has occurred, I am convinced that industry's

responsibilities can no longer be adequately discharged, however efficient and effective it may be, with the mere physical production of goods and services.

"First, let us ask whether our wealth-creating agencies, particularly that of industry, are to be based upon private enterprise or political management. I cannot see how any intelligent observer can have any possible faith in the capacity of political management to provide either stability or progress, if it should set out to operate the agencies of wealth creation, particularly industry. It is my firm conviction that any form of 'Government Regulation of Industry's is bound to result in an ever-increasing interference with the broad exercise of initiative—the very foundation of the American system. That is the natural evolution of bureaucracy. If that be so, might not the ultimate logical result be the necessity for the socialization of industry through the break down of the profit system induced by the accumulative effect of the ever-increasing political management? We do not need to go far afield to see definite evidences of that possibility."

DEPLORES BERRY CONFERENCE

"Therefore, I hold that political management, irrespective of degree, can have no other result than lowering the ceiling of industry's ability to contribute toward human progress. I am convinced that industry should stand united and adamant against such a proposal. I feel that Major Berry's forthcoming conference in Washington is most unfortunate. The impression that will be created will be a planned impression. It can not possibly be broadly representative of industry's thinking or reflect industry's experience. It will confuse the public mind. It will inject uncertainty just at a time when recovery is being accelerated. And let us not forget the impetus that returning prosperity received upon the termination of the NRA."

"I do not mean to convey the idea that industry should not co-operate with government. That is essential. But there must be a basis for co-operation. During the last few months, the social as well as the economic justification of 'business bigness' has been challenged, more particularly, I believe, as to the former count. We might well ask, does honesty of purpose reside only in smallness? Does the mere process of pooling common interests and talents of an enlarged group of individuals re-

sulting in an enlarged radius of activity, constitute in itself an offense against honesty, social justice or security?

"In accepting increased responsibilities, industrial leadership is certain to be attacked. This must be recognized and accepted. And because our economic yardstick is sure to be more or less in conflict with political policy, industry will be accused of injecting business into politics — of being non-co-operative — unpatriotic. We need not concern ourselves with such criticism. We must have confidence that a sound policy, honestly applied, must ultimately prevail. But it is important that we recognize that industry, as an institution, must not concern itself with promoting the fortunes of any political agency. It is solely concerned with establishing, in the public mind, a broader knowledge, a greater understanding as to the influence of any particular policy.

CITES THE CONSTITUTION

"Now, if we accept this viewpoint, we must establish an objective. For this, I turn to the Constitution of the United States, the preamble of which recites, in substance: 'To promote the general welfare of all the people.' In other words, we must move toward a soundly based and widely distributed economic well-being. This is the 'theory of plenty,' as distinguished from the 'theory of scarcity,' which has dominated our recent economic thinking and policies.

"But we must have a yardstick by which we can appraise and separate those proposals that promote our objective, as distinguished from those that retard our progress. Our yardstick, according to my thinking, consists of the most effective balance between the following:

"First, the reduction in the real costs and selling prices of goods and services.

"Second, a more economic balance of national income through policies affecting wages, hours, prices and profits.

"The purpose of the first manifestly is to bring selling prices within the range of the greatest number. The second recognizes the fact that, irrespective of what we may accomplish in expanding our markets from without, we must, to the most effective degree possible, develop the greatest possible consuming power from within. There lies our greatest opportunity. In other words, through the adoption of policies respecting wages, hours, prices and profits, and the separation of the latter between distributed and undistributed income, we must bring our capacity to consume in such relationship to our capacity to produce as will keep our wealth-creating instrumentalities virile.

"We must first convince ourselves—those who have the prime responsibilities of the major policies of industry—as to these fundamentals. We must develop a common understanding and a common conviction, for our progress will be accelerated by common thought and action. We must convince the organizations of industry as to the soundness or unsoundness of any particular proposal. This applies particularly to the workers within industry. They are importantly involved—their welfare is at stake. We must inform our stockholders—those who own industry."

Mr. Sloan reviewed the tasks facing industry, the first being the "liquidation" of the New Deal. He said in-

dustry had no more important duty than to stop the present government spending from mortgaging the future of recovery. Re-employment cannot be accomplished by government spending, he said; it must be done by increasing the workers' annual income.

To equalize the purchasing power of agricultural and industrial communities, he suggested "the solution of this problem appears more likely to lie in a suitable differential between the domestic price and the world's price of agricultural products, thus broadening the opportunities for production through opening the markets of the world to American agricultural commodities."

Training Supervisors and Key Men

The growing attention being given to employer-employee relations has served to focus attention on foremen and other supervisory employees because of their key position between management and the rank and file of the organization. This explains why, according to a report recently issued by the Policyholders Service Bureau of the Metropolitan Life Insurance Company, increasing emphasis is being placed on the training of such supervisors as foremen and the other "non-commissioned officers" of managerial staffs. A report of the survey, entitled *Training Supervisors and Key Men*, presents an outline of the practices of 85 companies that have inaugurated such training programs.

A clearly defined purpose is essential to the success of training programs, the reports points out. Analysis of the training methods of the 85 companies shows that there are three predominating objectives: (1) providing foremen with an opportunity to acquire information, (2) helping them to think clearly about their jobs, and (3) developing ability in doing what is required of them. Methods of training discussed in the report vary from the studied informality of the "conference" method to schedules of lectures on such subjects as economics, psychology, time study and cost accounting, also on company organization and history, products and markets, plant policies and practices. The report, referring to discussions used in connection with training lectures, states that it has been found that information acquired through such methods is better understood and more readily accepted.

The essentials for success in a program of foreman training, according to information in the report, are active interest from the management, a competent leader, a carefully selected group, practical subjects for discussion. The report states that there is difference of opinion as to the possibility of measuring results of training programs. Some companies, however, point to specific improvements in departmental production, to changes in attitude of certain foremen, or to the fact that trained foremen have developed faster as a group than those who have not received training.

The report also discusses methods of planning a training program, and the costs of a training program. The details of the practices of seven companies are outlined at some length. Copies of this report are available on request to the Policyholders Service Bureau, Metropolitan Life Insurance Company, 1 Madison Avenue, New York.

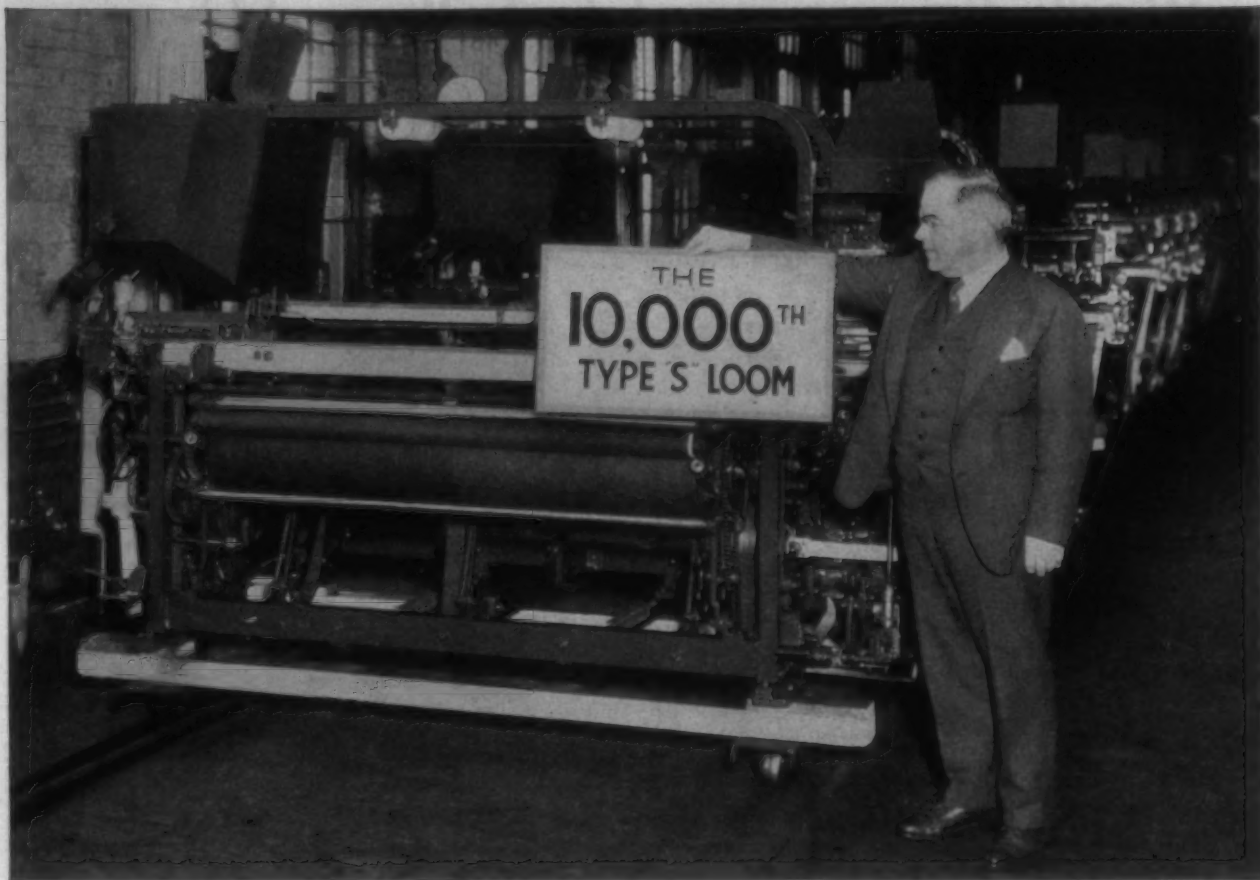


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Work Assignment In Silk and Rayon Manufacturing

By L. P. Alford

Consulting Engineer, New York, N. Y.

STRETCH-OUT, specialization, work assignment, or the introduction of labor-saving methods was one of the four fundamental issues in the nation-wide textile strike of August and September, 1934, in the United States. The other three major factors were: Recognition of the union and methods of collective bargaining; machinery for handling complaints of violation of Section 7-A and other labor provisions of the NRA codes of fair practice; hours and wages.

The problem of stretch-out is essentially one of industrial management. The board of inquiry for the cotton textile industry, under the chairmanship of Governor John G. Winant, reported in part as follows:

The so-called "stretch-out" system is essentially the introduction of labor-saving methods into the various processes of the textile industry. The introduction of the stretch-out system may accompany the introduction of new machinery; but the stretch-out is not necessarily related to the introduction of labor-saving machinery. Adoption of the stretch-out system does not necessarily increase the work load of the individual worker; but if not done scientifically it results in most cases in an additional burden on the employee.

Exploitation of the worker through introduction of the stretch-out system does not necessarily result from the mere increase in the number of looms or other machines the worker is called upon to tend. Whether the stretch-out results in exploitation depends upon numerous complicated factors such as the number of machines the worker must operate, the division of labor in operating those machines, the physical conditions under which the employee works, the character of the machine, the quality of the yarn, and like factors.

The problem in regulating the use of the stretch-out system is to find the proper balance between the fullest possible utilization of devices that will result in increased efficiency and at the same time protection to the worker from improper increase in work load. The problem is difficult because of the numerous and often incalculable factors that must be taken into consideration in reaching the proper result.

To deal with the situation portrayed by the Winant report, and following its general recommendations for settling the strike, a plan was put into effect by a group of presidential orders, and certain amendments to the codes of fair practice for the several branches of the textile industry. The principal actions taken in regard to stretch-out or work assignment are these:

The Textile Labor Relations Board shall appoint a

single individual as common chairman of the Cotton Textile Work Assignment Board, the Silk Textile Work Assignment Board, and the Wool Textile Work Assignment Board.

The cotton, silk, and wool work assignment boards shall study the actual operation of the stretch-out (or specialization) system in a number of representative plants, including such plants as may be selected respectively by the code authority affected and by the United Textile Workers of America and such other plants as the boards may themselves select either upon or without nomination of interested parties. The boards shall, after consultation with the employers and employees in the respective industries, and their representatives, prepare, and before January 1, 1935, submit to the President, recommendations for a permanent plan for regulation of work assignments in the respective industries.

An amendment to the code of fair practice for the silk textile industry, Article 13, has this provision:

In order to provide opportunity to develop a sound method and adequate organization for the regulation of work assignments, no employer prior to February 1, 1935, shall make any change in work assignment of any class of employees which shall increase the effort required over that prevailing on September 21, 1934.

The presidential order from which the foregoing requirements are quoted was dated October 16, 1934. The several boards were constituted during the succeeding weeks of the year. The members of the steel labor board became the textile labor board under the chairmanship of Judge Walter P. Stacy. The common chairman of the work-assignment boards was W. A. Mitchell. The members of the silk-textile-work assignment board were E. L. Oliver, employee representative, and J. W. Nickerson, employer representative.

An engineering research staff was organized under the silk board consisting of Norman P. Cubberly, S. A. Hazen, C. C. Jessop, H. P. Losely, J. A. Piacitelli, and the author of this paper as chief engineer. Only the personnel of the silk board and its research staff is given for the reason that this paper is restricted to a consideration of work assignment in the silk and rayon textile industry.

The several textile work-assignment boards ceased to exist on June 16, 1935, and were disbanded with the ending of the National Industrial Recovery Act. Previous to this date each board had reported a plan for a permanent organization of its industry. No action has been taken upon these recommendations (September, 1935).

Appreciation is gratefully extended to Messrs. Nicker-

(Continued on Page 10)

*Contributed by the Management and Textile Divisions for presentation at the Annual Meeting, New York, Dec. 2-16, 1935, of The American Society of Mechanical Engineers.

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How Government Textile Orders Are Handled

By Albert Escott

IT is estimated in Army Quartermaster circles that the total of purchases this year of clothing and clothing materials, and tenting, will reach many million dollars. Purchases in the year ended June 30, 1935, totaled approximately \$65,000,000. This includes requirements for the Regular Army, now increasing to 165,000 men, the CCC now being stabilized at 454,000 men, and the Reserve and the National Guard. There were approximately 2,900 camps provided in the Civilian Conservation Corps program. This calls for mattresses, pillows, comforters, sheets, mattress covers, towels, barrack bags, water bags, cots, mosquito bars, rope, twine. The CCC organization, if made permanent, will probably be limited to 300,000 men after June 30, 1936.

At the Philadelphia Quartermaster Depot, all the cloth and clothing and tentage and camp equipment, of any textile nature whatever, for all branches of the service, are purchased. Uniforms are manufactured in the Depot factory in peace-time, so as to establish models, quality standards, and methods, and to train foremen who can be transferred quickly in war-time to commercial factories to assist manufacturers in making acceptable garments. Underclothing is all purchased. CCC lumber jackets are a big item. Gloves, and leather mittens with knitted wool inserts are being bought in huge quantities. Raincoats of cotton, and windbreakers of wool, from commercial factories, are in heavy demand. Silk cravat purchases will run up to perhaps a million. Socks are purchased continually in large volume. Among the smaller items are handkerchiefs, insignia, braid, and hat cords.

In the Quartermaster Review, of Washington, there have been recently described the functions, organization, and command of the CCC. It is disclosed that approximately 9,000 Reserve Officers will be called to duty in carrying out the War Department's task when the maximum number of camps is reached under the present expansion program—"The Army's Greatest Peace-Time Achievement."

An outline here of procedure governing contractors for cloth, clothing, thread, tapes, bindings, and completed commodities may be of assistance to some manufacturers now supplying or hoping to supply the War Department.

Purchases are all made by the Contracting Officer at Philadelphia, and only on Procurement Directives. These issues from the Quartermaster General in Washington, based on requirements from Corps Areas and on needs of maintenance of reserve stocks at Depots of Storage and Distribution.

Under the Commanding Officer at the Philadelphia Quartermaster Depot, officers of the Regular Army are in charge of the several divisions: Procurement Planning, Procurement, Storage and Distribution, Transpor-

tation, Manufacturing. These and the officers under them are technically trained, some having had textile school courses and textile manufacturing experience. The civilian personnel also includes many men with commercial manufacturing background.

The Procurement Division issues advertisements for bids, to a list of manufacturers, previous contractors, and any responsible persons who write for an opportunity to bid. Persons and firms signifying a desire to bid are given the bid form, with specifications and drawings. Large drawings are charged for, on a refund basis in case the drawings are returned. It is important that every erratum and addendum applying to the invitation shall be obtained, and that every reference to a specification be studied carefully before bidding.

In calculating time for first delivery, allowance should be made for time to obtain approval from the Philadelphia Quartermaster Depot of the contractor's samples of materials and of finished article. When first bidding, a contractor may, through misunderstanding of specifications, or through incompetence of operatives, make and submit several samples before having one approved. In case a type sample is offered by the Depot or in case garment patterns are offered by the Depot, they should be obtained for guides in manufacture. A deposit is required, pending return to the Depot.

For manufacturing almost any of the commodities mentioned, unless the quantity is small, an inspector is provided by the Depot, to go to the contractor's plant by the time manufacturing operations are to begin on the contract, and to remain until the last shipment is made. The plant or plants specified in the bid are considered, before award is made, for suitability, and it is a policy of the Depot to forbid substitution of plants. Not only must a plant have had experience on the same or a similar commodity, but it must be sanitary.

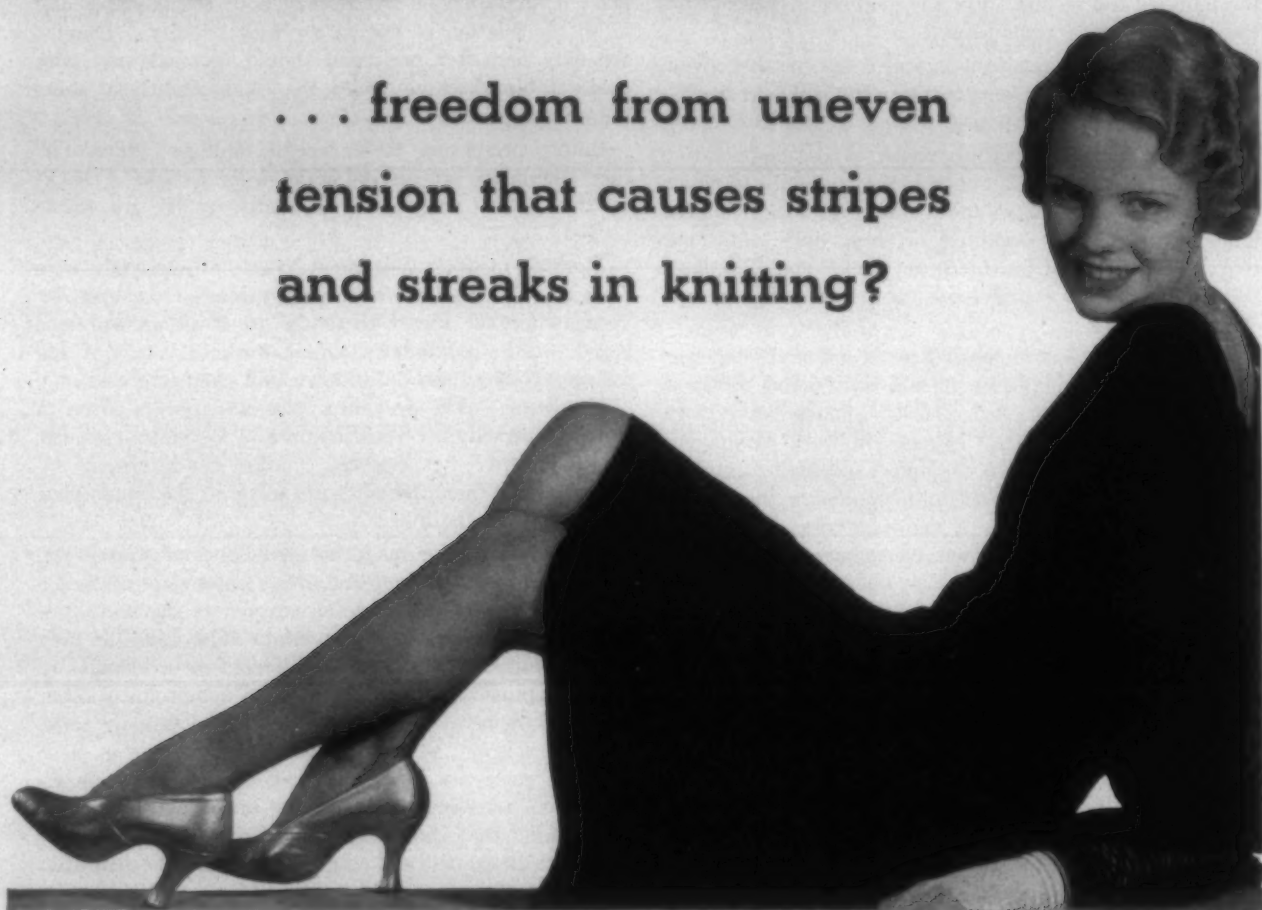
Time of performance is figured from date of contract if contractor furnishes all material, or from arrival of material in the city where plant is located if the Government furnishes and ships the material. Time of performance is also figured to date of arrival of acceptable goods at receiving Depot, on most contracts, and herein lies a danger that some contractors fail to foresee.

Approval of contractor's samples does not ensure acceptance of deliveries. There is at the present time an especially large body of factory workers who have had little or no training for their jobs. Through periods of idleness skilled workers have drifted from their former places of employment. A sudden starting of a plant necessitates rounding up green help, from laboring classes and from relief rolls. Much bad work is resulting, espe-

(Continued on Page 34)

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Work Assignment in Silk and Rayon Manufacturing

(Continued from Page 6)

son and Oliver, and to the engineers of the research staff, for the work which made this paper possible. The investigation was truly co-operative and credit should be given to the group as a whole for whatever is constructive in the findings and results. For the method of presentation the author is solely responsible.

Acknowledgment is also due, and is appreciably given, to H. J. Bickford for constructive criticism and helpful suggestion.

Recognition is also acknowledged of the co-operation of officials, executives, and operators of the mills in which investigations were made, and of the assistance of union-labor officials in the localities of these mills. Without this co-operation and assistance the studies could not have been conducted as expeditiously and thoroughly as was done.

The technical work delegated to the research staff was to study work assignments in silk and rayon mills, to investigate complaints of stretch-out and excessive work assignments, to investigate changes in work assignment asked for in petitions from employers requesting authority to make such changes, and to formulate a method of judging the reasonableness of the work effort required in any silk or rayon mill. A more comprehensive objective, though one less capable of precise definition, was to aid in improving industrial relations for the benefit of employers and employees alike.

Studies were made in 30 silk and rayon mills located over a wide area in the States of Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Pennsylvania, and Ohio. In size they ranged from some of the largest to others among the smallest concerns in the industry. As most of the investigations were made on weaving, this paper is restricted to a consideration of work assignment on silk and rayon weaving operations.

Emphasis should be placed upon the attitude of the members of the research staff which prevailed throughout the investigations. No effort was made to improve any process or operation, to shorten the time of performance, or to lower costs. Rather, the purpose was to secure creditable facts from which conclusions might be drawn. In this respect the work done was in sharp contrast to the usual industrial-engineering survey.

The results of the research work, apart from the determination of immediate questions at issue under complaints and petitions, were the formulation of a theory and principle of a reasonable work assignment, development of a method of judging the reasonableness of a work assignment that has been set, and a determination of times for elementary weaving operations on two classes of silk fabrics and one class of rayon fabrics. These industrial-management findings are given in this paper. They are supplemented by a formula for determining a loom assignment, and recommendations as to free-time allowances. These latter findings were not in the report of the research staff for the reason that they were judged to be matters without the scope of the investigation. They are included here to round out a presentation of work assignment.

In any consideration or application of these results one caution must be kept in mind. The Silk-Textile Work-Assignment Board accepted the findings of the research staff as indicating strongly that a set of principles and a technique for establishing a work assignment could be formulated and developed. However, these findings must be applied carefully in any local situation; the silk textile industry is so large and its conditions are so varied as to place a limitation on the results, both as standards and as to the relation of one factor with another. That is, the data hereafter presented should be used only with considerable checking under the local conditions where they are applied.

Before presenting these several findings certain further comments are advisable in order to give a background against which the technical results are to be judged.

Methods of work assignment based on time study were found by the research staff in only three of the mills investigated. In one of these the work assignment was based on the estimated "actual working time" of the weaver, in the others on an estimated operating efficiency of the looms. The prevailing practice appears to be to assign arbitrarily a certain number of looms to a weaver on "judgment," "experience," market conditions, or by guess. Often these decisions are made in the home office far away from the mill.

The investigations made on complaints of stretch-out, or excessive work assignment, either showed or created a strong surmise that a wage situation was the real occasion for the filing of the complaint. The issues as they were formulated had to do with increases or changes in work assignments. Actually they were symptoms of other situations more vital to the operators. Among these "other situations" were disadvantageous changes in piece rates, the necessity of increased effort to earn a satisfactory wage, a feeling that the wage earned was too little, and a belief that there was no true relationship between the effort demanded and the wages paid. The fear that acceptance of an increased loom assignment might throw another weaver out of work, with a consequent loss of earnings, was also given as a reason for filing certain of the complaints.

The general conclusion in regard to work assignment which was cumulatively forced by the several studies is:

A proper work assignment is an amount of work that can be performed with a reasonable expenditure of effort in a period of time mutually satisfactory to worker and management, and the accompanying remuneration must be equitable and agreeable for the work performed and the effort expended. The three factors, (1) amount of work done, (2) the time during which it is to be performed, and (3) the wages paid therefor, are positively interrelated. No equitable and lasting decision can be made concerning any one of these factors without giving due consideration to the other two.

PRINCIPLE OF WORK ASSIGNMENT

For the purpose of the investigation the following definition of work assignment was adopted:

"The amount of work allotted to be performed in a specified time."

(Continued on Page 20)

Textile Activity Continues High

Activity in the textile industry continued at a favorable rate during November, due chiefly to larger consumption of cotton and wool, and a continued high rate of rayon production, according to the *Rayon Organon*, published by the Textile Economics Bureau, Inc.

Consumption of cotton, the most important item of the textile series, may increase somewhat further during the next few months, says the paper, but doubt is expressed as to whether the present record consumption of wool can persist. "For this reason," it is added, "we expect the textile index to hold its present high level for the next few months, but any appreciable increase from the present levels would not seem to be in prospect."

Activity in the silk division slowed down considerably during November, deliveries to American mills totaling 37,012 bales, against 48,167 bales for October and 38,476 bales average for 1934. This November drop was expected, as the silk now being delivered is at the higher price levels of recent months. The takings of Japanese silk for the 1935-36 season are uniformly lower than last season because of the high prices obtaining.

While the deliveries of non-acetate rayon to American mills dropped in November, says the *Organon*, the decline from October was less than seasonally normal, and the seasonally adjusted deliveries index actually increased. Stocks of rayon yarn held by producers on November 30th were equal to five weeks' supply unchanged from October 30th. Because of the season of the year these stocks are considered remarkably low.

The phenomenal records of wool consumption over the last few months have attracted wide interest, according to the paper, and explanations therefore are rampant. Improvement in the industrial situation with its attendant increased usage of wool products is believed to be the most important factor. It is pointed out that October consumption of 42,800,000 pounds equaled the all-time record of March, 1923. Doubt is expressed that wool consumption will stay at its present high levels for many months longer.

World Cotton Use Near High Record

World consumption of all growths of cotton is running nearly equal to the highest rate on record, according to the New York Cotton Exchange Service. All of the major divisions of the world spinning industry are using the staple at a rate much above the average of recent years.

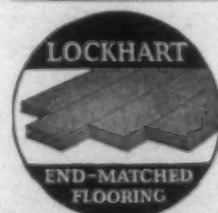
"We estimate world consumption of all growths of cotton in October at 2,304,000 bales," says the Exchange Service. "This compares with a consumption of 2,298,000 bales in October last year, and 2,172,000 in the same month two years ago. Consumption in the three months from August to October, inclusive—constituting the first quarter of the season—totaled approximately 6,433,000 bales. This compared with 6,232,000 bales consumed in the first quarter of last season, and 6,450,000 in the same period two seasons ago.

"Records of world consumption of all cottons month by month are available only for the past eight seasons, or back to 1927-28. In this period there has been only one October in which world all-cotton consumption was larger than in October this season; that was October, 1929, when the world used 2,375,000 bales of all growths, or 71,000 bales more than in October this year. The largest consumption in the August-October period in the last eight seasons was recorded in 1927-28; in that season, world all-cotton consumption from August to October,

inclusive, was 6,460,000 bales, or 27,000 bales more than in the same period this season. In other words, world consumption of all cottons is running close to the highest rate on record.

"Analysis of consumption by major divisions of the world spinning industry shows that all sections are using cotton at a relatively high rate, in comparison, at least, with their consumption in recent years. During the first quarter of the current season, mills of the United States used 1,410,000 bales of all growths, which, except for their consumption in 1933-34, was more than they used in that portion of any previous season since 1929-30. Consumption by mills of Great Britain totaled 686,000 bales, which was more than British mills spun in the first quarter of any previous season, since 1928-29. The Continent, in consuming 1,888,000 bales in the first quarter of this season, used more than in the corresponding period of any previous season, except 1933-34, since 1929-30. Mills of the Orient and of minor countries used more cotton in the first quarter of this season than in the corresponding quarter of any previous season, with the single exception of last season.

"In past years on an average, world consumption of all growths of cotton in the August-October period has been equal to approximately one-quarter of consumption during the full season. Calculating on this basis, consumption in August to October, inclusive, this year, was at an annual rate of approximately 25,732,000 bales. Last season the world used 25,428,000 bales. The largest consumption in any past season was 25,778,000 bales, in 1928-29. The smallest in any recent season was 22,427,000 bales, in 1930-31.



PROCESSED
for
PERMANENCE

In Company Housing!

Low first cost in labor and material, because it lays faster and without waste . . .

Enduring service through correct manufacture and seasoning of choice Alabama Yellow Pine.

Just Specify

LOCKHART BRAND

in

COTTAGE or BUNGALOW GRADES

Quotations from your lumber dealer or . . .

JACKSON LUMBER CO.
MANUFACTURERS

Lockhart,

Alabama



Silk Filaments' Shape and Size Cause Two-Tone Dyeing*

By F. A. Mennerich

IN the dyeing of knitted silk fabrics the appearance of slight color differences in adjoining sections of the same fabric is of frequent occurrence, and the cause of sub-standard merchandise and great financial loss. In silk stockings the trouble is exhibited by a sharp demarcation between the leg and foot portions.

It is commonly stated that differences in shade are due to chemical causes, such as differences in soaking, age, oxidation, bacterial action, tinting, natural color and nature. To obviate two-tone from these causes strict uniformity of lots and similarity of treatment have been repeatedly recommended and practiced. Despite all precautions taken in uniform soaking, tinting, uniformity of yarn and stitch formation, classification according to natural color, feel, or hardness, and despite all attempts made to correct the trouble by the addition of selective wetting agents in the dye bath, two-tone still persists in developing due to some inherent physical quality of the raw silk.

DISCOVERY OF PRINCIPAL CAUSE OF TWO-TONE

For five months I tried to find a leveling agent which would eliminate two-tone dyeing. Oils, soaps, solvents and numerous chemicals were tried, but none of them proved successful. They would not level out the inherent two-tone.

After hundreds of failures, I began to doubt whether two-tone was really due to chemical differences. I came to the conclusion that the real cause must be in physical differences of the silk filaments.

When the silk filaments were examined from a cross-section at 500 diameters, there seemed to be a difference in the shape and size of the filaments. The difference in shape was obtained from the diameter ratio, which is defined as the ratio of the minor to the major diameter of a filament at a given cross-section. It was found that two-tone was produced when there was a difference of 0.04 in the diameter ratios.

Except in rare instances, variation in shape is not noticeable to the eye by microscopic examination. Ordinarily the unlikeness is too slight to be noticed in cross-section, except by statistical measurements, even though extremely visible as two-tone dyeing in knitted fabric.

It is peculiar that two-tone dyeing is usually not noticeable when the light- and dark-dyeing silks are examined in skein form, whether in the raw, after tinting, or after boiling-off and dyeing. Two-tone is usually noticeable only at the line of demarcation between adjacent light and dark panels. If a string is held so as to cover this line of demarcation the difference in hue seems to disappear.

EXPERIMENTAL PROCEDURE

After the raw silk is degummed or the color stripped from dyed stockings a small bundle of filaments is selected and adjusted to size by a special thread sizer. In cross-sectioning, the bundle is drawn through a tiny hole in a thin metal plate by means of a fine wire loop. The projecting ends of silk are cut off with a sharp razor blade flush with the two smooth faces of the metal plate. The metal plate is mounted upon the stage of a compound microscope strongly illuminated by the substage mirror with transmitted light from a bright carbon arc lamp. The image of the cross-section is projected at a magnification of 500 diameters upon a ground glass screen ruled co-ordinately. Measurements of the diameters are made on the ground glass by means of a small transparent celluloid scale with special graduations, so that both the minor and major diameters may be read directly in microns with one setting of the scale.

FACTORS AFFECTING SHAPE AND SIZE OF FILAMENTS

It has been recognized that silk from different breeds of silk worms, and different seasons and climatic conditions show characteristic dye absorption. Through the courtesy of C. Walter Seidel, selected cocoons were obtained from the Sericultural Institute of Nakano. The data show that, for the particular cocoons tested, the shape varied with the breed, and within the same breed of cocoons varied with the latitude. Also it was apparent that the spring yellow silk was flatter than the spring white, and that the spring cocoon filaments were larger. There was a 40 per cent variation in the shape of the filaments and a 20 per cent variation in the size.

RELATION OF TWO-TONE TO OTHER PROPERTIES

From a limited number of observations, two-tone dyeing showed no consistent relationship to:

1. Feel of raw silk skeins.
2. Color of raw silk skeins.
3. Hardness, as determined by incline plane serigraph.
4. Exfoliation of raw silk.

Attempts were made to discover some relationship among all possible combinations of the following five properties, but no relationship whatsoever was found between any two of these properties: hardness, tenacity, mean diameter, diameter ratio and exfoliation.

EFFECT OF SHAPE AND SIZE OF FILAMENTS UPON TWO-TONE DYEING

In stockings, which showed no two-tone dyeing, the differences in diameters and diameter ratios were negligible. In analyzing the causes of two-tone dyeing, it was found that differences in shape accounted for 65 per cent of the cases and that another less important factor entered

(Continued on Page 30)

*Microscopist, U. S. Testing Co., Inc., Hoboken, N. J. Paper before U. S. Institute for Textile Research.



GRASSELLI *Formic* ACID frequently saves WASTE OF DYESTUFFS

● Good dyestuffs are too expensive to waste. Yet every ounce in the dye-bath that's not utilized simply means dollars lost down the drain-pipe.

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Grasselli Formic Acid, 85% and 90%, is available in 120 lb. carboys from any of our branches listed below.

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Acetic Acid	Glauber's Salt
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Bi-Sulphate of Soda	Sulphate of Alumina
Bi-Sulphite of Soda	Sulphate of Soda, Anhydrous
Carbonate of Soda	Sulphite of Soda
Caustic Soda	Sulphide of Soda
Solid and Flake	Sulphuric Acid
Chloride of Lime	Tri-Sodium Phosphate
Chloride of Zinc	
Epsom Salts	



gives a very complete exhaust of the dye bath

Personal News

Gurney H. Kearns, hosiery manufacturer of High Point, has established a fellowship at Duke University for the study in the field of American Christian thought.

David Clark, editor of the Textile Bulletin, is confined to his home by illness. He is to take a rest of several weeks before returning to the office.

J. F. Morris has resigned as superintendent of the Pinehurst Silk Mills, Hemp, N. C., a position which he filled for the past two years.

B. A. Knowlton, who has been manager of the Oakland plant, Kendall Mills, Newberry, S. C., has been assigned to some special work for the company and will likely be located at Charlotte.

S. T. Pearce has resigned as president, treasurer and manager of the Roanoke Mills Company, and president and treasurer of the Patterson Mills, Roanoke Rapids, N. C.

Luther Atherton has been promoted from overseer of carding and spinning at the Cowikee Mills No. 1, Eu-
faula, Ala., to superintendent of the Cowikee Mill No. 4, Ozark, Ala.

D. T. Quillen, of Spartanburg, S. C., is now associated with George W. Walker, of Greenville, representing the Sterling Ring Traveler Company, of Fall River, Mass., in the Southern territory.

D. O. Carpenter, for the past six years assistant manager of the Oakland plant, Kendall Mills, Newberry, S. C., has been promoted to manager of the mill. He has served with this mill for six years and has been with Kendall Mills for 11 years, going to Newberry from the Paw Creek plant.

Alfred Terrell, of New York, executive vice-president of the Simmons Bed Company, New York, has been elected president and treasurer of the Patterson and Roanoke Mills, Roanoke Rapids, N. C. It is understood that he will continue to live in New York and that the active management of the mills will continue under the local executives.

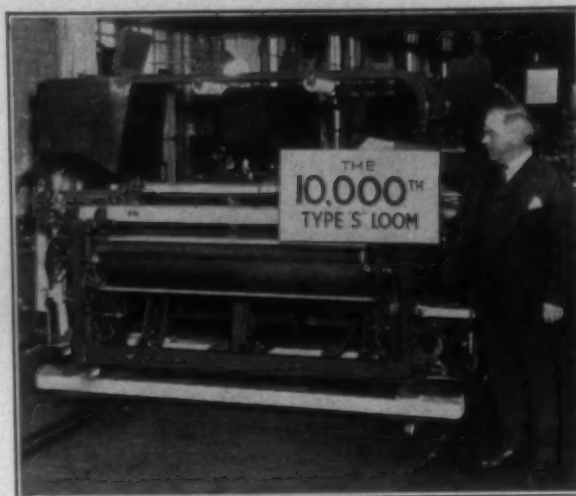
William G. Wilson, of Thomasville, obtained a patent on a double sole clipper and clamp for knitting machines whereby a ren-enforcing yarn can be knitted into the sole of a stock and not on the top of the foot portion. The clamp and cutter is mounted on the dial cap and permits the re-enforcing yarn to be lowered to knitting position for a half course and withdrawn and clipped at the point of withdrawal, thus leaving no loose ends which later would have to be clipped and removed from the finished stocking. This saves in both labor and yarn. This patent is assigned to Maurice Mills Company of Thomasville. Announcement of the patent came from Paul B. Eaton, patent attorney of Charlotte.

National Cotton Week

National Cotton Week, which for the past five years has signaled the opening of the summer cotton selling season, will be observed next year during the week of June 1st to June 6th, the Cotton-Textile Institute announces.

Three weeks later than in recent years, the week of

People Worth Knowing



The above picture shows Irving H. Verry, vice-president and general sales manager of the Crompton & Knowles Loom Works, Worcester, Mass., with the 10,000th Type "S" Loom manufactured by the company. It is interesting to note that in selling 10,000 of these looms in four years sales were made in the United States and 25 foreign countries. In the United States, 1,905 looms were sold to mills in New England, 2,153 to mills in Pennsylvania, New Jersey and New York, while 5,082 looms were sold to mills in the South, or slightly more than half the total sales.

June 1st-6th was designated by the Institute's Executive Committee in response to the suggestions of important participants among the wholesale and retail trades. It is anticipated that warmer weather and other factors will be more favorable for a co-ordinated promotion of the proportions which National Cotton Week has reached.

First sponsored by the Institute in 1931, National Cotton Week last spring, the most successful of the series, enlisted the active co-operation of nearly 40,000 merchants through the country. Because of the importance of cotton goods, numbering hundreds of items, in the stocks of department and dry goods stores, National Cotton Week has had an unusual appeal and has proved itself a practicable and effective agency for massing the country's selling forces behind a concentrated promotion of cotton goods.

OBITUARY

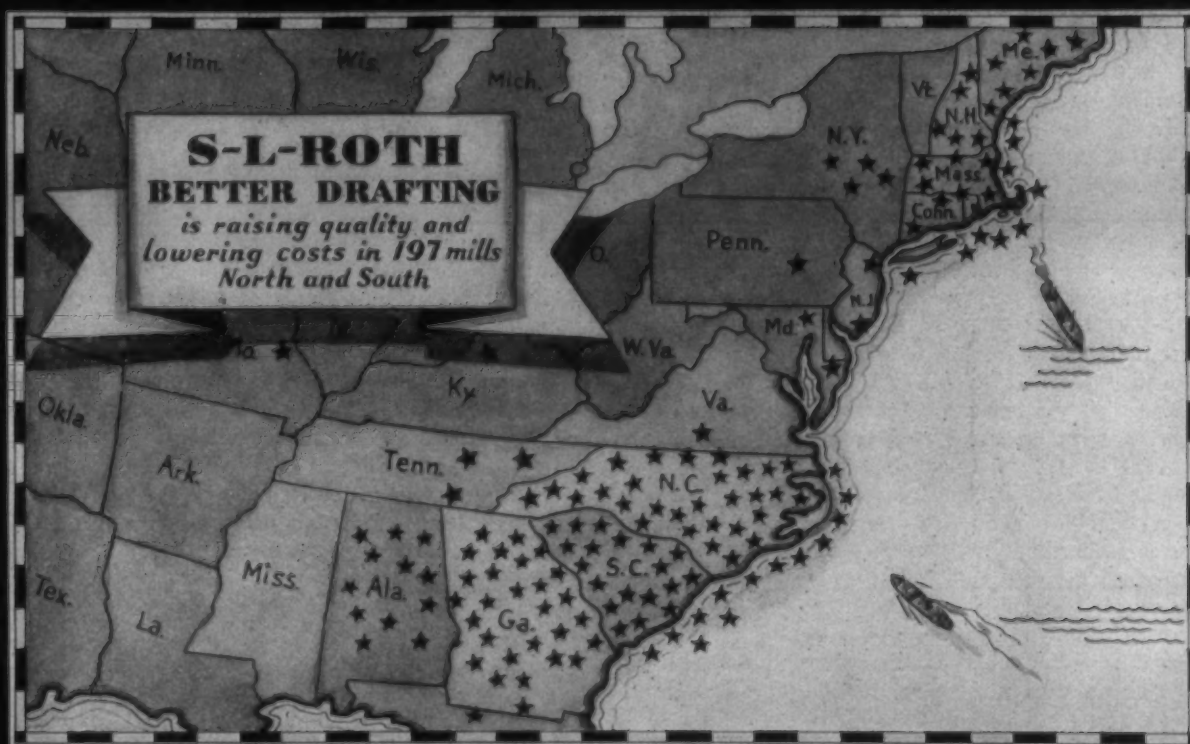
WILLIAM K. MOORE

Dalton, Ga.—William K. Moore, 59, president of the Crown Cotton Mills, Dalton, former president of the Georgia Cotton Manufacturers, died after an illness of two weeks brought on by a heart attack.

Mr. Moore was born in Dalton on July 22, 1876, and had lived here all his life. He was educated in the local public schools and at the age of 21 went to work in the office of the Crown Cotton Mill.

In January, 1909, he was elected secretary of the company and upon the death of G. W. Hamilton, founder of the mill, in February, 1919, he was elevated to the presidency, which office he held at the time of his death.

**15% of the active U.S. Spindles
are now Saco-Lowell-Roth ("LONG
DRAFT")**



— An overwhelming preference for Saco-Lowell

Quality with Economy and Simplicity

Adopted usually because it reduces manufacturing costs, Saco-Lowell-Roth Spinning carries with it a "bonus" in the form of improved yarn quality—an improvement so important that this system has been adopted as standard equipment by mills producing the finest quality yarns. For further information write Saco-Lowell Shops, Boston, Charlotte, Greenville, Atlanta.

Where quality yarns are spun, expect
to find Saco-Lowell-Roth Spinning

**SACO-LOWELL-ROTH
BETTER-DRAFT SPINNING**

Why Institute Did Not Participate In Berry Conference

The Cotton-Textile Institute did not participate in Co-ordinator George L. Berry's industry conference at Washington last Monday (December 9th):

Advising Major Berry of the declination of his invitation by unanimous action of the Institute's executive Committee, Dr. Claudius T. Murchison, President of the Institute, wrote the Co-ordinator, in part, as follows:

"The cotton textile industry believes in competition in industry. It also believes in a rationalization of that competition by voluntary efforts to avoid cut-throat competition with its resultant disastrous effects on the public, employers and employees. To that end and in the effort to aid re-employment and to establish improved conditions in the industry alike for employee and employer, it formulated and observed its code under the NRA. The Supreme Court appears to hold that it is beyond the power of Congress to make enforceable such measures of self-regulation of competition by an industry as were formulated by it in the code. The Supreme Court also appears to hold that it is beyond the power of Congress to formulate and impose such measures on such an industry and to any such Governmental action this industry has been and would be unalterably opposed.

"Under these circumstances, this industry is remitted

to voluntary efforts to rationalize its operations and its competition. These efforts it is making and will continue to make. The returning tide of business is assisting those efforts.

"This industry is opposed to turning aside from these constructive efforts in order to lean on the broken crutch of legislation. It regards it as idle and injurious to talk of legislation for control of the operation of competitive manufacturing and distributing and service industries at the approaching session of Congress. If any such legislation were desirable it now appears to be impossible in view of the Supreme Court's decision on the NRA.

"If opinions differ as to the extent of the limitations defined by that decision, certainly no sound course for new legislation could be charted until the Supreme Court has determined the validity or scope of the provisions of the Agricultural Adjustment Act, the Wagner Act, the Guffey Act, and other existing legislation involving the regulatory power of Congress. Further, the provisions of the anti-trust law are now again before the Supreme Court for interpretation on matters which bear directly on any prospective legislation.

"The session of Congress immediately preceding a
(Continued on Page 25)

FOR SALE

7,000 Spindle Cotton Yarn Mill

At \$5.00 Per Spindle—or At What It Will Bring

LOCATED MARION, SOUTH CAROLINA

7,168 Spinning Spindles—Offered Subject to Previous Sale at

\$35,000 For Machinery, Buildings and Real Estate

Cost Approximately \$200,000.00—A Real Business Opportunity

MUST BE SOLD AT ONCE. If not sold at \$35,000.00 by Dec. 20th, offers for the whole—or any part of machinery or real estate—will be considered.

See—Write—or Wire

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MARION HOTEL

MARION, SOUTH CAROLINA

Sleek & Lovely

ENKA RAYON

**THE SEASON'S MOST WANTED
SATIN BACK CREPE**



● This satin back crepe, so appropriately named Sleek & Lovely, is being enthusiastically chosen by most of the representative cutters for a wide range of evening gowns, dinner, bar and street dresses. Woven of Enka rayon, Sleek & Lovely has an interesting mat surface, a smooth satin back and a luxurious drape. Now showing in the new Cruise and Palm Beach colors as well as winter shades.

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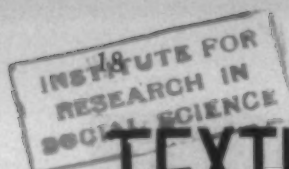
Lord & Taylor promoted this charming Sleek & Lovely evening gown for women in their recent newspaper advertising.

MODEL BY
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A Jane Engel "suggestion"...afternoon frock in Sleek & Lovely. Advertised in the New Yorker of November 16th, 1935.

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The Broken Crutch

MAJOR BERRY'S party at Washington last Monday proved a bust. It blew up with a bang barely after it got started. Hailed as an attempt to resuscitate the Blue Eagle, it turned out to be just another nail in the coffin of a very dead bird.

Major Berry is Co-ordinator for Industrial Co-operation. He sent out 5,000 invitations for his conference. About 2,000 representatives of labor, business and industry came to see what could be done, or not be done, about the plan to work out some new form for a revival of NRA.

Whatever else may be said of the conference, it made one thing very clear. Industry and business want no more of government control. Even if it is offered to them in the guise of co-operation rather than actual control, they shy away from it as a burnt child dreads the fire. It was gathered from the conference that one experience with "government partnership in business" is enough. Most of the larger industries, by refusing to take any official part in the conference, had already shown how they felt about it.

The Cotton-Textile Institute, transmitting its refusal to take part in the conference, pointed very clearly why it failed to see that the conference could be of any benefit. The statement from Dr. Murchison, president of the Institute, pointed out that it has been clearly shown that Congress can not enforce such measures of self-regulation of competition within industry, as were formulated by its code. The statement explained that the textile industry is continuing its voluntary efforts to rationalize its operations and its competition. "These efforts," the Institute said, "it (the Industry) is making and will

continue to make. The industry is opposed to turning aside from these constructive efforts to lean on the broken crutch of legislation."

The statement from the Institute, published elsewhere in this issue, will, we believe, receive the almost unanimous endorsement of the cotton textile industry. It made it very clear that the mills are no longer willing to repeat their previous experience under government control and see no need of trying to rehash a scheme that was nullified by the Supreme Court.

Almost everyone will agree that there were certain beneficial clauses in the textile code that are worthy of retention. The industry is on record to this effect and is making a sustained effort to keep certain code features in effect. But the irritation caused by contact with government agencies, while under NRA, left a sore spot that will not soon be healed.

Major Berry, in a vitriolic statement issued after his conference proved its futility, had some very harsh words for those in industry who will not co-operate with the government. Prior to his meeting date, he had stated that 11,000,000 unemployed in the country must be fed and clothed and that if industry will not do it by providing work, then the government must do it with relief appropriations.

"Business foots the bill in either event and there is no other answer," he said.

Major Berry, along with certain other high government officials, seems to have the idea that industry and business are deliberately checking recovery. It is our honest belief that all manufacturers would welcome business improvement to the extent that they could operate their plants fully and employ as many people as possible.

Business has been improving steadily since the passing of NRA, or in other words, since it ceased to lean on the "broken crutch of legislation."

Two Bills To Fight

SAD as it seems, Congress is soon to meet again. From what may be gathered in Washington, two proposed laws in which the textile industry has a vital interest, will come up for early consideration.

First, there is the Ellenbogen Bill. This act was conceived and drawn by attorneys for the textile union. In effect, it would tie the whole industry in a neat package and throw it into the lap of Gorman, McMahon and their ilk. Between labor union domination and government control the industry would very likely enter into a "breathing spell" that would prove to be its dying gasp.

William Green, head of the American Federation of Labor, no later than this week, said he would again wage a fight for the Black 30-hour bill and for the Mahoney bill. The latter measure would establish a Federal licensing system for all industry, giving operating licenses only to those plants which complied with fixed regulations regarding wages and hours.

Business with the mills has been much more active during the past several months. In spite of the improved demand and large sales, it continues to be a very difficult matter to sell goods at a profit. It is easy enough to see what would happen to production costs if the mills were forced on the 30-hour week.

The fallacy of the 30-hour week has been presented time after time in these columns and needs no further comment now. Suffice it to say that the industry needs to do all it can to prevent the passage of the Ellenbogen and Black Bills.

It is not too early to talk to Senators and Congressmen before they return to Washington.

Processing Tax Decision

THE Supreme Court, as this is written, is hearing arguments relative to the validity of the processing tax. It is expected that the decision of the court will be rendered on January 13th.

In the event that the Supreme Court renders a decision in which it finds that the processing tax is unconstitutional it will open up some very interesting possibilities. In the light of previous decisions, there is a very strong belief in some quarters that the tax will go the way of some of the other New Deal plans. With the decision only a few weeks off, there is naturally much speculation in the textiles as to the effect on prices if the tax is removed. If the tax is taken off, prices which now figured to include the tax, will naturally decline. But, as the *Journal of Commerce* points out, there is a growing belief that the prices will not drop the full amount of the tax. There is a strong belief that prices will not drop more than half the amount of the tax.

Another interesting angle is that present sales of gray goods are made under contracts that protect the buyer in case the tax is dropped. Not only is the buyer protected, but if he covers his normal needs now, and gets a refund if the tax is removed, he may even have a nice opportunity to profit if prices do not decline to the full extent of the tax.

Settlement of the tax question, one way or another, will be welcome. While the mills are concerned primarily with the taxes they have been paying on the cotton they use and the gov-

ernment efforts to control the size of the cotton crop, the Supreme Court decision will in all likelihood determine the validity of the entire vast structure of AAA activities.

A Hull of A Mess

THE solicitude of Secretary of State Cordell Hull for the Japanese cotton manufacturers is hard to understand.

The following story shows the situation that now exists. Twenty-five years ago there were a number of textile students at a Northern textile school. Some of these were from the North, some from the South and others from Japan and China. The Japanese students returned home, however, years ago and are now engaged in manufacturing textiles in their own country.

The United States Government through the textile code set up a minimum wage of \$12.00 in the South and \$13.00 in the North, and the textile students engaged in manufacturing in these sections are maintaining these minimum standards. On the other hand the Japanese who have returned home are paying 90c and less per week for labor, and Secretary Hull says that it is fair to permit them to exploit our market.

Under the circumstances it is but natural to expect imports from Japan to increase steadily and finally take a large part of the American market. It is truly A Hull of a Mess.

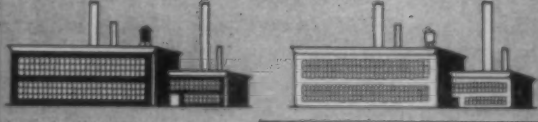
Dangerous Ambitions

A dangerous ambition more often lurks behind the mask of special zeal for the rights of the people than under the forbidding appearances of zeal for the firmness and efficiency of Government . . . of those men who have overturned the liberties of Republics, the greatest number have begun their careers by paying an obsequious court to the people, commencing demagogues and ending tyrants.—*Alexander Hamilton*.

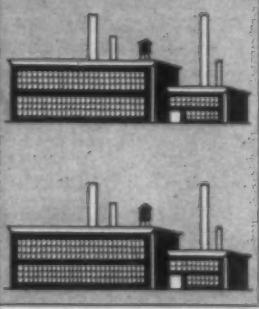
Work

Let me but do my work from day to day,
In field or forest, at the desk or loom,
In roaring market-place or tranquil room;
Let me but find it in my heart to say,
When vagrant wishes beckon me astray,
"This is my work; my blessing, not my doom;
"Of all who live, I am the one by whom
"This work can best be done in the right way."
—*Henry Van Dyke*,

IN 3 OUT OF 4 MILLS



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HIGH SPEED
CONING AND WARPING
OFFERS
*More RETURN
ON Investment*
THAN ANY
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Mill News Items

SPINDALE, N. C.—The Spencer Mills have given orders to Borne, Scrymser Company to revamp their spraying equipment for treating cotton in the picking room.

Mt. AIRY, N. C.—The Quality Mills have been organized here by W. E. Lindsay, Wilson Barber, and H. O. Woltz, all of Mt. Airy, and G. O. Lipe, of Landis. Mr. Lipe is superintendent of the Linn and Corriher Mills, Landis.

GRIFFIN, GA.—The Georgia Kincaid Mills No. 2 have recently installed three Pomona deep well pumps. Two will be used to supply water to the dye plant and the other for supplying water for the slashers and the drinking systems in the mill villages. The equipment is from the McBurney Stoker and Equipment Company of Atlanta.

HIGH POINT, N. C.—L. E. Hodges of Spray, general manager in this section of the Marshall Field interests, has announced the local Carolina Cotton and Woolen Mills Company, employing 125 persons, will close indefinitely and perhaps permanently on January 1st "due to a change in merchandising principles at the home office in Chicago."

SHELBY, N. C.—In the Cleveland Cloth Mills village here, new roofs have been put on all of the 100 residences, and each residence has been painted two coats and repaired. A second story has been added to the office, and is now ready for occupancy. Ten thousand dollars has just been expended in repairing and modernizing the village. The office building has had five rooms added on the second story.

CHESTER, S. C.—Work has started on the construction of five apartment houses at the Eureka unit of the Springs Cotton Mills. There will be four apartments to each house. They are of frame construction. It is understood that they will cost around \$3,500 a building.

ATLANTA, GA.—According to an announcement by the Industries Bureau of the Chamber of Commerce, removal of the Finemore Underwear Corporation of New York City to Atlanta this week is expected to provide employment for about sixty within the next ten days. The announcement said that installation of machinery and equipment was begun last Saturday and that all officials, including Harry Fine, president; I. Koepfel, secretary, and Ralph Fine, treasurer, will establish permanent residences here, as will Simon Glasser, cutter and designer, and Joseph LaMel, foreman.

BURLINGTON, N. C.—May Hosiery Mills, Inc., reports for the fiscal year ended August 31st, net income of \$226,232, after depreciation, taxes and all other charges, equal after preferred dividends, to \$1.21 a share on 80,000 common shares. This compares with a net profit of \$279,348, or \$1.86 a common share in the previous year.

KINSTON, N. C.—A report here said holders of Class B bonds of Caswell Mills, Inc., might appeal from a court order for the trustees to operate the spinning plant for two months as a test. Holders of Class B bonds include the City of Kinston and Lenoir County. It was indicated they were impatient for sale of the plant to private interests.

Mill News Items

ROARING RIVER, N. C.—The Gordon Cotton Mills of Roaring River, idle for some time, has started operation again, it was learned here this week.

DENTON, N. C.—The Thornton Knitting Company here has been completed and machinery is being installed. The recently organized business will manufacture men's fancy hose.

Forty knitting machines are set up in a section of the Rogers Hosiery Mill building leased by the new firm, according to J. E. Wilkins, an officer.

ASHEVILLE, N. C.—A. J. L. Moritz, vice-president of the American Enka Corporation, announced here that the company would spend \$500,000 on normal replacements in 1936.

NEW ORLEANS, LA.—The Lane Cotton Mills have placed orders for immediate shipment, Borne, Scrymser Company improved cotton condition equipment.

TAYLORS, S. C.—Construction of an addition to the Southern Bleachery, which will result in the installation of new machinery from the East, was made known here.

A building 50 by 100 feet is being constructed by the Fiske-Carter Construction Company and will be completed in February, it was stated by Harry R. Stephenson, president.

Mr. Stephenson said that much of the present equipment would be rearranged. He declined, however, to say just what machines would be added.

"We will not have any need for additional help when the building is completed," Mr. Stephenson said.

THOMSON, GA.—Oberman & Co., of Jefferson City, Mo., manufacturer of pants, is establishing a branch factory here. Between 100 and 150 machines are understood to be the initial equipment, some of which are already en route.

Oberman & Co. is to use the Mary Delia Cotton Mills, which had been idle for several years.

One of the prime purposes of the opening of a branch plant by Oberman & Co. here is understood to be to gain needed facilities for better distribution in the Southeast and in the War West. Goods destined for the Coast, where the firm does a good business can be sent by boat from Savannah, it is explained. Proximity to various of the mills upon which Oberman depends for its piece goods is also mentioned as an advantage. This city is about 40 miles from Augusta, on the road to Atlanta.

The terms under which Oberman & Co. comes here involve the use of the main building for five years, rent free with tax exemption.

Mills Get Government Orders

Washington.—Contracts to supply the Works Progress Administration with approximately 12,000,000 yards of assorted textiles were awarded fourteen textile mills by the Treasury Department's procurement division.

Delivery of the goods is asked for not later than December 31st. They will be distributed direct from the mills to work relief sewing rooms throughout the country. Contracts were awarded the following:

Cannon Mills Co., Kannapolis, N. C.: 476,000 yards

A Report of Results Of Brookmire Recommendations

Brookmire has issued the "Advertiser" which reports the results of Brookmire recommendations for the past year. Graphs are presented which demonstrate the degree to which Brookmire recommendations—for both bonds and stocks—have outdistanced the Dow-Jones averages.

Interested Investors are invited to write for this report, without incurring obligation.

Ask for Bulletin N-15

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of bleached muslin and 150,000 yards of birdseye.

McC Campbell & Co., New York City: 50,000 yards of chambray, Type A, and 98,000 yards of blue denim.

Leslie Evans & Co., New York City: 400,000 yards of chambray, Type A.

Prince Lauten Corporation, New York City: 281,750 yards of bleached muslin.

Pepperell Manufacturing Co., New York City: 2,000 yards of cotton prints (73x65); 4,000 yards of printed broadcloth; 356,000 yards of chambray, Type A; 25,000 yards of bleached muslin.

Wade Manufacturing Co., New York City: 1,055,750 yards of outing flannels (3.5).

George Wood Sons & Co., Philadelphia, Pa.: 400,000 yards of birdseye.

M. Lowenstein & Sons, Inc., New York City: 2,194,500 yards of cotton prints (73x65); 557,000 yards of printed broadcloth; 1,866,750 yards of plain broadcloth, and 267,250 yards of bleached muslin.

Cone Export & Commission Co., New York City: 499,000 yards of chambray, Type A; 107,000 yards of blue denim.

J. P. Stevens & Co., Inc., New York City: 74,000 yards of birdseye.

Rosemary, Inc., New York City: 145,000 yards of blue denim; 3,000 yards of outing flannel (3.5).

Riverside & Dan River Cotton Mills, New York City: 570,000 yards of plain broadcloth; 248,000 yards of birdseye.

Lane Cotton Mills Co., New Orleans, La., 1,351,500 yards of blue denim.

Fine goods Sales Associates, Inc., New York, 1,119,500 yards of lawn.


World Rayon Production To Set Record in 1935

The United States will not be alone in establishing a new high record output of rayon yarn and fibre for 1936, as England, Japan and Italy, other important producing countries, also will establish new records according to the current issue of the *Rayon Organon*, published by the Textile Economics Bureau, Inc.

Japanese production of rayon for the ten months ending October, 1935, showed an increase of 45 per cent compared with the corresponding 1934 period. At this rate the indicated 1935 Japanese rayon production would reach a new high of about 220,000,000 pounds compared with 153,100,000 pounds for 1934.

Italian rayon production totaled 84,749,000 pounds for the seven months ending August, an increase of 43 per cent over the 59,023,000 pounds output for the corresponding 1934 period. Government orders are responsible for the Italian rayon boom, principally for the supplying of rayon underwear for the troops in Ethiopia. Even the normally large exports of rayon and rayon products have declined appreciably to supply the new and pressing requirements of the War Department.

British production of rayon yarn and products totaled 89,490,000 pounds for the nine months ending September, 1935, an increase of 32 per cent compared with output of 67,500,000 pounds in the corresponding 1934 period. The bulk of this increase was in yarn taken by the weaving industry.



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Under its new policy and regime (with the renowned host, Achille Borgo, as managing director) the hotel will remain open throughout the year. While cuisine and appointments are dominantly French, the Sevilla-Biltmore is hospitably American in its comforts, conveniences and—yes—cocktails. Of course the courteous staff speaks English. An innovation in service is a special department to handle all technical and travel details for its guests—such as attending to luggage and customs inspections, entry of personal cars, arrangements of parties beyond the hotel, tours of the island and any other personal service desired.

It's still the famous Sevilla-Biltmore—tallest building on the Prado in the heart of Havana's beautiful downtown area—but it has many new attractions to enhance its old charm. With the Sevilla-Biltmore's reopening, Cuba is again really Cuba!

Hosiery Mills Get Warning On Output

Manufacturers of all types of women's hosiery are being warned by the National Association of Hosiery Manufacturers to produce as far as possible during the coming months of January and February, against orders only, in

building stocks for the next three months of March, April and May, to study the experiences of past years and thereby hold down these stocks within reasonable selling limits; to have in mind that higher silk prices represent the tying up of capital to a larger degree and finally to have in mind that the cost of manufacturing is going up not only through the rise in silk but also through the imposition of the payroll tax effective January 1st.

The association warning points out that ordinarily the months of January and February represent the low dip in demand of women's hosiery for the year, with the high peak in demand starting at the end of August and normally receding at the end of December. The production and shipment figures of the association for all types of women's hosiery show that in January and February of this year the production amounted to 8,018,871 dozens, while the shipments were but 6,769,165 dozens, the big gain in production being in full-fashioned goods and shipments were not in proportion.

In contrast to this situation in January and February of this year the production and shipment figures for the same months in 1934 were more nearly on a level, the production figure for all kinds of women's hose being 6,583,184 dozens and the shipments 6,100,564 dozens, or almost on a par comparatively.

Likewise for the first five months of this year this rate of increase in production over shipments continued to a degree, resulting in the end in a difference between production and shipments in full-fashioned hose of 1,400,000 dozens on the side of the former.

The association does not overlook the fact that during the month of January and February the demand for full-fashioned goods was larger than in average years. But nevertheless the resulting drop in prices in the summer of this year is attributed to the increase in stocks over shipments.

Estimate of Cotton Crop Is Lower

Washington.—The Agricultural Department estimated the 1935 cotton crop at 10,734,000 bales, a reduction of 407,000 bales, or about 3.7 per cent from the forecast a month ago.

The 1935 crop estimated is about 1,098,000 bales greater than production in 1934.

Cotton futures at New York closed barely steady, 13 to 20 points lower than the close Saturday. In the New Orleans market, cotton futures closed steady at net declines of 14 to 24 points.

Most of the decline in production estimates during the past 30 days occurred in Texas and Oklahoma where weather conditions were reported unfavorable for the maturing and picking of the late crop.

HARVESTED ACREAGE GREATER

The harvested acreage, now estimated at 27,331,000 acres, is about 1.3 per cent greater than the total harvested in 1934.

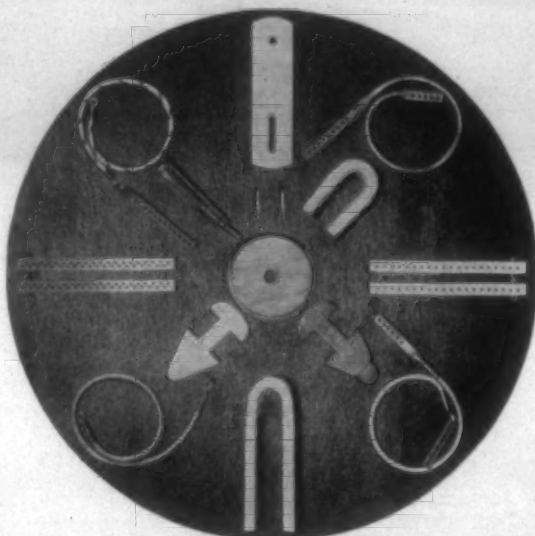
The average yield per acre this year was reported to be 188 pounds compared with 170.9 pounds in 1934 and a ten-year average, 1924-33, of 177.1 pounds.

A month ago 11,141,000 bales were costcast. Last year production was 9,636,000 bales, and two years ago, 13,047,000 bales.

Ginnings of this year's crop to December 1st were reported by the Census Bureau to have totaled 9,362,343 running bales, compared with 9,019,834 to that date last year and 12,106,377 in 1933.

An indicated yield of 188.0 pounds of lint cotton to the acre was reported by the Agricultural Department, which estimated the area for harvest this year as 27,331,

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000 acres after abandonment of 1.9 per cent of the 27,872,000 acres in cultivation July 1st this year.

The acre yield last year was 170.9 pounds and the 1924-33 ten-year average, 177.1 pounds. A month ago the department estimated the area for harvest as 28,652,000 acres. In July it reported the area in cultivation as 29,166,000 acres. Last year the area in cultivation July 1st was 27,883,000 acres and the area picked 26,987,000 acres, while in 1933 the area in cultivation was 40,852,000 acres and the area picked, 29,978,000 acres.

Virginia, 30,000 bales; North Carolina, 585,000; South Carolina, 745,000; Georgia, 1,060,000; Florida, 29,000; Missouri, 200,000; Tennessee, 320,000; Alabama, 1,060,000; Mississippi, 1,260,000; Louisiana, 555,000; Texas, 3,050,000; Oklahoma, 535,000; Arkansas, 890,000; New Mexico, 78,000; Arizona, 125,000; California, 205,000; other States, 7,000; Lower California, 70,000 (not included in U. S. or California figures).

Ginnings prior to December 1st this year were reported by the Census Bureau as follows:

Alabama, 1,022,411 running bales; Arizona, 86,255; Arkansas, 733,509; California, 175,000; Florida, 26,396; Georgia, 1,029,474; Louisiana, 538,127; Mississippi, 1,211,086; Missouri, 142,533; New Mexico, 50,945; North Carolina, 534,127; Oklahoma, 370,108; South Carolina, 710,101; Tennessee, 283,181; Texas, 2,419,227; Virginia, 23,417; all other States, 5,446.

Institute Not To Participate in Berry Conference

(Continued from Page 16)

national election is no time for cool, non-partisan consideration of legislation affecting the conduct of industry. Any such proposals at this time would certainly be thrown into politics. Any such proposals would inevitably stir up recrimination, strife, and uncertainty—and this at a time when with good feeling, unity and confidence steady progress toward further recovery can be made. They would defeat the very purpose of the policy of the 'breathing spell' which is already contributing significantly to such recovery.

"This industry has a program. It is to press confidently forward with voluntary co-operation in establishing and maintaining sound competitive conditions and practices; in maintaining and, if possible, improving its standards of employment and compensation of its employees; in seeking to do business on a basis of fair return on its investment which will enable it to maintain those standards, preserve its credit and render improving service to the public.

"This is its job. This we believe to be now the job of all industry from which it should not be diverted into time consuming and confidence destroying speculation and controversy over legislation during a pre-election year and in a field in which the Supreme Court, in the cases coming before it, will be engaged in marking the boundaries of Congressional power.

"These being the carefully considered views of the industry, the Institute feels that no useful purpose would be served by its attendance at the conference. It is convinced that it would be entirely unjustified in participating in the election of representatives to a general council, constituted as proposed, which would be authorized or appear to be authorized to speak for this industry on these matters."

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American Enka**Resumes Dividends**

The American Enka Corporation has resumed dividends on the common stock, with a disbursement of 25 cents per share to be made January 2nd to stockholders of record December 16th. The last payment on the issue was 25 cents per share on July 2, 1934.

Exports of Knit Goods

Exports of cotton knit gloves during October amounted to 3,352 dozen pairs, having a value of \$6,349, according to the Department of Commerce. Mexico, taking 1,074 dozen pairs, valued at \$2,012, and Norway, taking 540 dozen pairs, valued at \$1,125, were the principal consumers.

A total of 16,218 sweaters, shawls and other knit outerwear of cotton,

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valued at \$9,127, was exported during the month, with Cuba and the Phillipen Islands between them accounting for most of it.

Wool knit bathing suits shipped abroad amounted to 144 dozen, on which a value of \$2,735 was placed. The largest individual shipment, 36 dozen, valued at \$750, went to the Union of South Africa.

The value of other wool knit goods

exported was put at \$37,416, with \$24,216 worth going to Cuba.

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May Hosiery Mills Employees Will Get \$47,350 From Club

Burlington, N. C.—The executive offices of the May Hosiery Mills, Inc., have made known that its employees will receive \$47,350 through the distribution of savings club funds. This includes interest in the amount of \$1,379, which has been added to the individual accounts, at the rate of 3 per cent during the year.

The officials say this sum represents an increase of 47 per cent over last year, showing that the employees have realized more and more the wisdom of saving a small part of their weekly pay to provide an extra amount for holiday spending. This is handled by the auditing department of the mills, and in each individual case the amount deducted from the pay is directed by that person.

Mills Not Using Child Labor

Raleigh, N. C.—Maj. A. L. Fletcher, State Labor Commissioner, said there was nothing to be alarmed about in the child labor situation in North Carolina as he answered a published charge by Courtney Dinwiddie, that child labor is increasing in the State.

Dinwiddie cited North Carolina as one of the States in the nation reporting an important increase in child labor and added that 77 per cent of the increase was in textile mills.

"Mr. Dinwiddie neglected to say," Major Fletcher commented, "that for the period May 26, 1935, to September 1, 1935, only 62 employment certificates were issued to children under

16 and under 14 to work in manufacturing establishments of this State. This was an increase over the same period in 1934, when no certificates were issued.

"Of these 62 children, 48 were certified to work in cotton textile plants. In other words, approximately 77 per cent of the children certified went into cotton textile plants. This is not strange when you consider that close to 75 per cent of our industrial workers are employed in the cotton textile industry."

Major Fletcher added that 535 children were working in North Carolina textile plants in 1931 and 4,975 in 1929 and that the 48 certificates issued in three months this year could be compared to 6,901 issued during a single year 12 years ago.

Erect Garment Plant

Manchester, Tenn.—Mayor Wright Hickerson announces plans are now being formulated for Manchester's new industrial plant, which will engage in the manufacture of garments. The plans call for a plant which will have about 30,000 feet of floor space. The contract for the occupancy of the building has been approved by the City Council and a bond issue for its construction was authorized. The local banks have agreed to purchase the bonds.

Jap Textile Pact

Ignored, Charge

Washington.—A charge that Japan is already violating through subterfuge its "gentleman's agreement" with the United States to restrict its textile exports to the Philippines was

made by Representative Rogers, Republican, Massachusetts.

Noting published reports from Tokyo that this country had called the attention of Japanese Ambassador Saito to Philippine imports of Japanese cotton goods, totalling 26,000,000 square meters for three months ended October 31, Mrs. Rogers declared in an interview:

"When the United States-Japanese agreement concerning the Philippines was made, I called attention to the danger of Japan-made cotton goods entering the Philippines from Chinese ports under the guise of merchandise from that country.

"It appears that my prediction has been fulfilled. There is no question that Japan is brazenly ignoring the agreement by subterfuge and always intended to get around it."

Boost in Carolinas Mill Payroll

Washington. — Decided improvement in factory employment and payrolls in North Carolina and South Carolina, as compared with the depression's low month of March, 1933, was reported by the Labor Department.

The labor statistics bureau disclosed that North Carolina factory payrolls had increased 99.7 per cent through October, 1935, while in South Carolina the gain represented a percentage of 58.9 per cent over March, 1933.

Only the comparative percentages were announced.

North Carolina mill employment was 34 per cent greater in October, 1935, than in March, 1933, while in South Carolina the percentage of increase was 5.2.

Textile Foundation Directors Meet

Washington.—The board of directors of the Textile Foundation met here for a routine discussion of business matters. No statement concerning the nature of the meeting was forthcoming, but it was indicated that a statement would be forthcoming later.

Among those in attendance were: Franklin W. Hobbs, president of the Foundation; Frank D. Cheney, Cheney Bros.; Stuart W. Cramer, Cramerton, N. C., cotton manufacturer; Secretary of Commerce Roper, and E. T. Picard, secretary of the Foundation and chief of the Textile Division, Bureau of Foreign and Domestic Commerce.

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Cotton Goods Markets

New York.—There was a fairly good business in cotton goods last week. In the gray goods division, sales were above production, although the business done in print cloths was considerably lower than in the other constructions. The price situation continued very firm, and in some instances premiums were paid on goods wanted for quick delivery. The stock situation continued very healthy.

The position of mills on print cloths was not as strong as in other divisions, and for this reason there was some tendency to show concern about the print cloth situation. Some traders explained that print cloths actually are in a good position, but that because of the exceptionally strong backlog built up in other divisions print cloths seem poor by comparison. When compared to the usual December position, print cloths are in excellent shape, it was held.

Trading in narrow print cloths was moderate with no price changes. There were some sales of 36-inch 6.70-yard 60x48s at $5\frac{1}{2}$ c and of 32-inch 6.50-yard 64x60s at $5\frac{1}{2}$ c. The 27-inch 7.60-yard 64x60s moved moderately at $4\frac{3}{4}$ c.

The carded broadcloth situation did not change. Further sales of 100x60s were booked for January at $9\frac{1}{8}$ c and some small quick lots moved at $9\frac{1}{4}$ c, with February and March offered at 9c and moving moderately at that figure. The 80x60s remained steady at 7c and 112x60s were sold on contract at $9\frac{1}{8}$ c.

Sheetings were sold again in fair quantities. Price changes were few. Many mills were sold far ahead and able to take only moderate business for the early part of the first quarter. Others had January production available in fair quantities and booked good sales.

The fine goods market has worked into a strong position by virtue of recent business and moderate sales again were made. In some divisions buyers found that despite increased demand and rising prices, mills declined to increase their production. This gave confirmation to reports that fine goods prices are far below cost. Mill men are unwilling to put on new production even at the advances.

Print cloths, 27-in., 64x60s	5
Print cloths, 28-in., 64x60s	$5\frac{1}{8}$
Gray goods, 38½-in., 64x60s	$6\frac{1}{4}$
Gray goods, 39-in., 80x80s	$8\frac{3}{4}$
Gray goods, 39-in., 68x72s	$7\frac{1}{2}$
Brown sheetings, 3-yard	$9\frac{1}{4}$
Brown sheetings, standard	$9\frac{3}{4}$
Tickings, 8-ounce	19
Denims	15
Brown sheetings, 4-yard, 56x60s	$7\frac{3}{4}$
Dress gingham	$17\frac{1}{4}$
Staple gingham	10

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Cotton Yarn Markets

Philadelphia, Pa.—The yarn markets were only moderately active last week and total sales were less than during the more active buying several weeks ago. Spinners continue to get a fair total of smaller orders, but larger contract business has been limited. Prices showed practically no change but continued on a firm basis. While some buyers have complained that yarn prices have advanced faster than cotton prices, spinners pointed out that the actual prices paid for cotton are higher than the buyers seem to think.

Makers of knit goods in this district report that those selling through jobbers have booked little spring business as yet and therefore have not been in position to place large knitting yarn contracts, but knitters that sell chains and department stores direct have booked substantial orders. It is from the latter that largest contracts in knitting yarns for first half of 1936 delivery came in the first half of November.

New business in combed yarns has diminished considerably as against a month ago but shipments hold at a good rate. Spinners of these yarns are exercising good control over their output and so far as possible are limiting their production to nearby probable consumption. The Government is expected to place shortly contracts that will call for approximately 2,000,000 pounds of combed peeler yarn and; unless the concerns receiving such contracts hold options on their requirements, a temporary scarcity of peeler yarns in the counts required may occur. Meanwhile, though prices on combed yarns are substantially unchanged, the prices now being asked are less in favor of the buyers.

Many spinners have orders to carry them along until next spring and, while anticipating higher prices, are willing to give their customers the benefit of a rise by showing themselves willing to accept advance business running up to next July. The advance which has occurred in prices on sales yarns since previous contracts expiring around the end of March were placed is regarded as the basis for spinners accepting business for deliveries in the second quarter of the year. Deliveries continue at a heavy rate and to many consumers seem as fully important as prices.

Southern Single Skeins			Southern Single Warps		
8s	25	25	10s	28	28
10s	28	28	12s	28 1/2	28 1/2
12s	28 1/2	28 1/2	14s	29	29
14s	29	29	16s	30	30
20s	31	31	20s	31	31
26s	32 1/2	32 1/2	24s	32 1/2	32 1/2
30s	35	35	26s	32 1/2	32 1/2
36s	39	39	30s	35	35
40s	41	41	36s	40	40
Southern Two-Ply Chain Warps			Southern Two-Ply Skeins		
8s	28	28	10s	28 1/2	28 1/2
10s	28 1/2	28 1/2	12s	29	29
12s	29	29	14s	29 1/2	29 1/2
16s	30 1/2	30 1/2	16s	30	30
20s	31 1/2	31 1/2	20s	31 1/2	31 1/2
24s	32 1/2	32 1/2	24s	32 1/2	32 1/2
26s	32 1/2	32 1/2	26s	32 1/2	32 1/2
30s	35	35	30s	35	35
36s	40	40	36s	40	40
40s	42	42	40s	42	42

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Silk Filaments' Shape and Size Cause Two-Tone Dyeing

(Continued from Page 12)

ed the picture, namely, the size or mean diameter of filaments.

Taking a difference in diameter ratio of 0.03 as sufficient to produce two-tone dyeing, it was found that the consistency of results was 65 per cent. If a difference in mean diameter of 0.7 was taken as sufficient to produce two-tone dyeing, the consistency was 45 per cent. When both differences were considered, 0.03 for diameter ratio and 0.7 micron for mean diameter, the consistency was 90 per cent.

When all the variables involved and many other possible causes of two-tone are considered, the remarkable consistencies, with no relation existing between shape and size, seem to prove conclusively that the shape and size of the filaments are characteristic for different lots of silk and markedly affect the shade of dyeing.

Forty ten-bale lots were examined to determine the average shape and size of the filaments and their variations within and among different lots. The results are based on more than 50,000 measurements. Two-thirds of these lots could be selected as showing no two-tone within the ten-bale lots. One-fourth of the lots could be chosen as showing no two-tone either within the same lot or among different lots.

RESUME

1. One principal cause of two-tone dyeing is due to differences in shape and size of the silk filaments in adjoining sections of fabric.

2. A difference of 0.03 in diameter ratio or a difference of 0.7 micron in mean diameter is sufficient to produce two-tone dyeing.

3. The flatter and larger filaments dye darker than the rounder and small filaments.

4. Silk from different breeds, and possibly from various seasons and districts, are characterized by a difference in shape and size of the filaments.

5. The discovery that differences in shape and size of filaments produce two-tone should make obvious the futility of attempting to correct for two-tone by any chemical adjustments in soaking, boiling-off and dyeing when such differences exist.

6. No consistent relation was found between two-tone dyeing and other properties, such as color of raw silk, feel, hardness and exfoliation.

7. No relationship was found among such properties of raw silk as diameter ratio, mean diameter, exfoliation, hardness and tenacity.

8. By grading raw silk according to shape and size of filaments, two-tone dyeing can be minimized if ten-bale lots are so selected as to show a variation of less than 0.03 in diameter ratio and less than 0.7 micron in mean diameter. By routing ten-bale lots in throwing so that consecutive lots do not exceed this variation, about two-thirds of all lots can be used with nearly complete elimination of inherent two-tone dyeing.

It is recognized that certain variations in soaking, knitting and weaving may cause two-tone, but this discussion

deals with a principal cause which is beyond the control of throwster, knitter or weaver except as the raw silk itself is selected for uniformity in shape and size of filament.

Work Assignment in Silk and Rayon Manufacturing

(Continued from Page 10)

The principle of reasonable work assignment was declared to be:

"A reasonable work assignment is an amount of work to be done in a given time, for a wage mutually satisfactory to worker and management, and capable of being performed by a worker of average skill in the time specified with an amount of free time sufficient for personal needs and the relief of fatigue."

METHOD OF JUDGING A WORK ASSIGNMENT

From the foregoing principle of work assignment it follows that the method of judging a work assignment must take into account nine cases, or combinations, of amount of work done and free time. These cases group into three classes when the work accomplishment is used as the control factor.

Cases 1, 2, and 3: Work accomplishment is equal to the work assignment; free time is equal to, greater than, or less than the standard.

Cases 4, 5, and 6: Work accomplishment is less than the work assignment; free time is equal to, greater than, or less than the standard.

Cases 7, 8, and 9: Work accomplishment is greater than the work assignment; free time is equal to, greater than, or less than the standard.

On nearly every weaving job the actual work accomplishment will be either greater loss than the amount specified in the work assignment. Thus Rule 2, which follows, is the one which will usually apply. Rule 1 is included to complete the analysis of all nine cases, but without the expectation that it will be often, if ever, applied.

Rule 1: If the amount of work done is equal to the amount specified in the work assignment, as in Cases 1, 2, and 3, standard times shall be calculated for the number of occurrences observed. If the amount of free time so determined is equal to, or greater than, the standard, the work assignment shall be judged to be reasonable. If the amount of free time so determined is less than the standard, the work assignment shall be judged to be excessive.

Rule 2: If the work done is less than, or greater than, the amount specified in the work assignment, as in Cases 4 to 9, the number of occurrences that would have prevailed, if the actual work done had been equal to the work assignment, shall be computed. Standard times shall then be calculated for the number of occurrences as computed for the specified work assignment. If the amount of free time so determined is equal to, or greater than, the standard, the work assignment shall be judged to be reasonable. If the amount of free time so determined is less than the standard, the work assignment shall be judged to be excessive.

(Continued next week)

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How Government Textile Orders Are Handled

(Continued from Page 8)

cially in the sewing trades. Skilled men cannot depend upon helpers to follow directions. Factory managers do not realize the necessity of closer inspection. Many try to depend upon the Quartermaster Depot's inspector to catch all seconds. That is not his function. He is there to observe. He has other duties: submitting samples to the Depot Laboratory of materials as they arrive for use on the contract; reporting shipments, methods, production rate, and quality; and watching all processes of manufacture and packing, where specifications are involved. It is, by law, the contractor's responsibility to deliver, by the dates specified in the contract, at the places specified,

the quantities contracted for, of articles fully meeting the specification requirements. The Government inspection at the factory does not relieve him of that responsibility. Nor does the approval of samples relieve him, the submission of samples being a precautionary measure only. Rejection of deliveries means extra freight, extra time, and may result in assessment of liquidated damages for delinquency in delivery, provided a clause for such assessment is embodied in the contract.

It should be stated, however, that while the Contracting Officer is without authority to change a contract, he and the other officers have often been heard to express their desire to co-operate in every way possible with contractors furnishing supplies to the War Department. Complaints are heard patiently, and questions answered as quickly as possible. It is the desire of the Government that manufacturers shall find Government contracts desirable, and that they shall continue to bid.

Finally, as to refund of assessments for delinquency. In certain contracts a liquidated damage clause is applied. Assessment is made after failure at any given date to comply with the delivery schedule. Claim may be filed for refund of such assessments, but such claim cannot be considered till the final delivery has been made. Then a statement of facts may be sent by letter, addressed to the Comptroller General of the United States, through the Commanding Officer, Philadelphia Quartermaster Depot. At the Depot, such records are attached as are pertinent, and the claim is then forwarded to Washington.

Prospective bidders or manufacturers interested in any phase of the purchase of textiles by the Army should address the Commanding Officer, Philadelphia Quartermaster Depot.

Payments for supplies purchased by the Depot are made very promptly, advantages being taken of cash discounts offered. A finance office of the United States Army is located on the Depot's reservation. Maj. S. R. Beard, Finance Officer, is in charge of that office.

CHATTANOOGA, TENN.—December 7th, according to an announcement, local citizens owning about \$200,000 of stock in the Springfield Woolen Mills, Inc., of Springfield, Tenn., will receive an estimated \$50,000 in a second liquidating dividend on the two classes of preferred stock. They received about \$100,000 in the first liquidating dividend on June 11, 1935. According to an announcement received in Chattanooga from R. S. Dulin of Danville, Ky., trustee, the distribution of assets will amount to 35 per cent on Class A preferred and 15 per cent on Class B preferred. Local holdings are about evenly divided between the two classes. In local financial circles expectations are that the Class A will pay out about 115 per cent on its par value and that Class B will yield about 50 per cent of its par value. The June 11th liquidating dividend amounted to 75 per cent on Class A and 25 per cent on Class B. When the second liquidating dividend is disbursed next month, the liquidation will total 110 per cent on the par value of Class A and 40 per cent on the par value of Class B.

When the company went into trusteeship, the mills, which have been in operation for nearly half a century, were capitalized at \$1,000,000. The common stock amounted to \$500,000 par value, Class A preferred \$300,000 and Class B preferred \$200,000. By action of the preferred stockholders, the mills were placed in trusteeship around a year ago.

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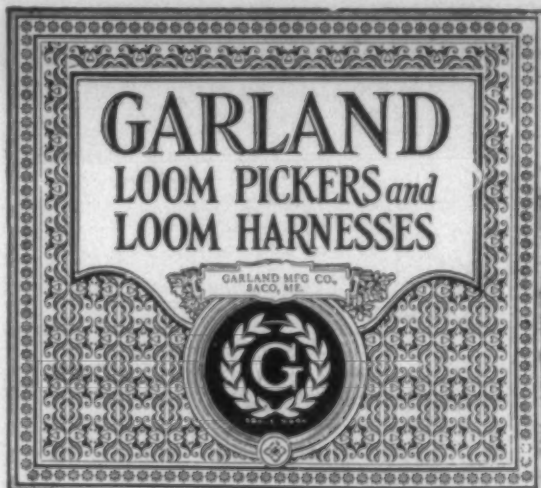
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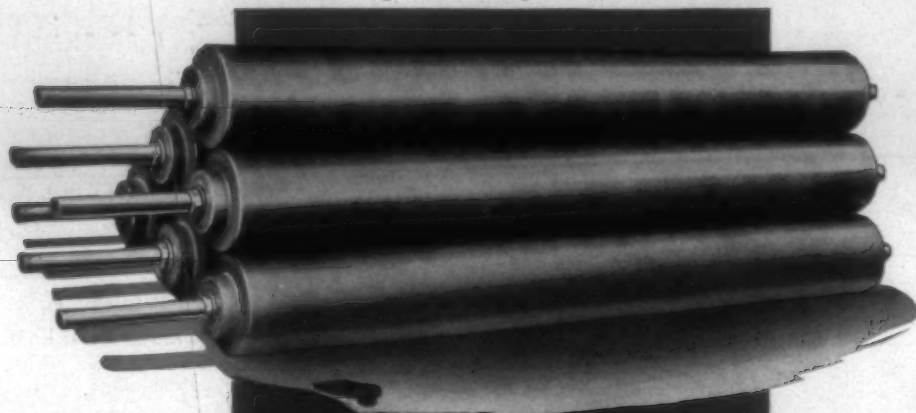
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